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Keller et al.

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(54) **HIGH TEMPERATURE ELASTOMERS FROM LINEAR POLY (SILARYLENE-SILOXANE-ACETYLENE)**

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Related U.S. Application Data

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(51) **Int. Cl.**[7] **C08G 77/44**

(52) **U.S. Cl.** **525/477**; 528/43; 528/34; 528/32; 528/38; 528/35; 585/416; 556/410; 556/431

(58) **Field of Search** 528/43, 34, 32, 528/38, 35; 525/477; 585/416; 556/410, 431

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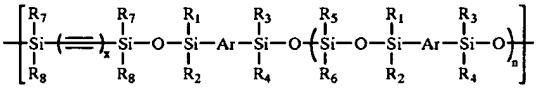
(57) **ABSTRACT**

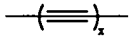
A linear polymer has repeating units represented by the formula



wherein

(a) n is an integer greater than or equal to 0,

(b) x is an integer greater than or equal to 1, and



represents an unconjugated acetylenic group when x is equal to 1 or conjugated acetylenic groups when x is greater than 1;

(c) Ar is an aromatic group, and

(c) R^1, R^2, R^3, R^4, R^5, R^6, R^7 and R^8 are independently selected from the group consisting of alkyl, aryl, alkylaryl, haloalkyl, haloaryl and mixtures thereof. The linear polymer may be thermally cured to form a crosslinked polymer.

17 Claims, No Drawings